

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/047,280	01/14/2002	Yung Yip	10305US01	4504	
7590 08/02/2005			EXAMINER		
Attention: Eric D. Levinson			NGUYEN, TANH Q		
Imation Corp. Legal Affairs		ART UNIT	PAPER NUMBER		
P.O. Box 64898		2182			
St. Paul, MN	55164-0898	DATE MAILED: 08/02/2005			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	n No.	Applicant(s)					
Office Action Summary		10/047,28		YIP ET AL.					
		Examiner		Art Unit					
		Tanh Q. N	guyen	2182					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status									
1) Responsive to communication(s) filed on 18 May 2005.									
2a)⊠ This action	n is FINAL . 2b)[☐ This action is n	on-final.						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
 4) Claim(s) 1,2,4-8,10-16,26,27 and 30-34 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1,2,4-8,10-16,26,27 and 30-34 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 									
Application Papers	i								
 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 14 January 2002 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 									
Priority under 35 U.	.S.C. § 119								
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 									
Attachment(s)	,								
	son's Patent Drawing Review (PTO-9 ure Statement(s) (PTO-1449 or PTO		4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite	D-152)				

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

Art Unit: 2182

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-2, 4-5, 7-8, 10, 14-15, 26-27, 30-31 are rejected under 35 U.S.C. 102(e) as being anticipated by **Greco (US 2003/0070056 A1)**.
- 3. As per claims 1, 4, Greco discloses a system [FIG. 1] comprising:
 a data cartridge [40, FIG. 2] carrying a non-tape storage medium [11, FIG. 1],
 wherein the data cartridge includes read/write circuitry [12, FIG. 1 and FIG.2] to access
 the non-tape storage medium and an external electrical connector coupled to the
 read/write circuitry [18, FIG. 1; 48, FIG. 2]; and

a tape drive emulator [10, 17, FIG. 1; 209, 210, 215, 216, 218, FIG. 7; [0044][0045]; [0069]-[0084]] having an electrical socket [19, FIG. 1; 140, FIG. 3] to receive the electrical connector of the data cartridge.

4. As per claims 2, 5, 7, 8, 10, 14, 15, Greco discloses a socket having a set of connectors that engage the electrical connections of the data cartridge using a normal force on the cartridge ([0036]-[0040]), hence the socket being a zero insertion force

Art Unit: 2182

socket - claim 2;

the tape drive emulator comprising a host interface [15, FIG. 1] to electrically couple the tape drive emulator to a host computing device [14, FIG. 1] – claim 5;

the tape drive emulator comprising a translation unit [209, 210, 215, 216, 218, FIG. 7] to translate commands between the host interface and the electrical socket, the translation unit receiving data stream commands from the host interface and translates the data stream commands into disk drive format commands ([0044]-[0045]; [0069]-[0084]) – claims 7-8;

the non-tape storage medium comprising a disk-shaped storage medium [11, FIG. 1] – claim 10;

an automation unit [90, FIG. 4] to selectively retrieve the data cartridge [40, FIG. 4] from a plurality of data cartridges conforming to industry standard dimensions for magnetic tape data cartridges ([0033]), hence the data cartridge and the tape drive emulator being compatible with existing automation systems – claim 14;

the data cartridge comprising a housing conforming to industry standard dimensions for magnetic tape data cartridges ([0033]) – claim 15;

5. As per claims 26-27, 30-31, see the rejections to claims 1-2, 5, 7 above.

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Application/Control Number: 10/047,280 Page 4

Art Unit: 2182

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 8. Claims 6, 12, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Greco** in view of **Albrecht et al. (US 2002/0159182 A1)**.
- 9. <u>As per claim 6</u>, Greco discloses the claimed invention except for the host interface conforming to one of the SCSI, the Fiber Channel, and the EIDE/ATA interfaces. Greco, however, discloses an embodiment of a data cartridge being described by copending US patent application S/N 09/842,030 by Albrecht US 2002/0159182 A1 ([0033]).

Albrecht discloses the data cartridge communicating at the data transfer interface using the SCSI format ([0055]), hence the tape drive emulator communicating with the data cartridge using an interface conforming to the SCSI interface. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a host interface conforming to the SCSI interface to maintain compatibility between the tape drive emulator and the host computing device.

- . - -

Art Unit: 2182

Since Greco discloses an embodiment of a data cartridge being described by Albrecht, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a SCSI interface as the host interface in Greco's tape drive emulator to enable data transfer between the host computing device and the tape drive emulator and to maintain compatibility between the tape drive emulator and the host computing device.

It is further noted that since there are a plethora of interface formats that can be used as the host interface format to enable communication between the host computing device and the tape drive emulator, there is no patentability in using a host interface with a particular format.

10. As per claim 12, Greco discloses the claimed invention except for the data cartridge comprising a disk drive controller to control access to the non-tape storage medium, wherein the controller communicates with the tape drive emulator according to one of the SCSI, the Fiber Channel, and the EIDE/ATA interfaces. Greco, however, discloses an embodiment of a data cartridge being described by copending US patent application S/N 09/842,030 by Albrecht - US 2002/0159182 A1 ([0033]).

Since it was well known in the art at the time the invention was made for a disk drive to comprise a disk drive controller to control access to the disk, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a disk controller in Greco's data cartridge to allow Greco's data cartridge to control access to the non-tape storage medium.

Albrecht discloses the data cartridge communicating at the data transfer interface

Art Unit: 2182

using the SCSI format ([0055]), hence the data cartridge communicating with the tape drive emulator using an interface conforming to the SCSI interface.

Since Greco discloses an embodiment of a data cartridge being described by Albrecht, and since Albrecht discloses the data cartridge communicating with the tape drive emulator using an interface conforming to the SCSI interface, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a disk drive controller that use SCSI interface in Greco's data cartridge to control access to the non-tape storage medium.

It is further noted that since there are a plethora of interface formats that can be used to allow the disk drive controller to communicate with the tape drive emulator, there is no patentability in using a particular interface format for communication between the disk drive controller and the tape drive emulator.

11. As per claim 13. Greco discloses the claimed invention except for the socket of the tape drive emulator providing power to the controller of the data cartridge via the electrical connector of the data cartridge. Greco, however, discloses an embodiment of a data cartridge ([0033]) and an example of a loader ([0039]) being described by copending US patent application S/N 09/842,030 by Albrecht - US 2002/0159182 A1.

Albrecht discloses the socket [130, FIG. 11; 141, FIG. 23] of the transfer station (loader [100, FIG. 11 and FIG. 23]) providing power to the data cartridge [40, FIG, 23] via the electrical connector [48, FIG. 3] of the data cartridge ([0096]-[0097]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Albrecht's power transfer from the loader to the data

cartridge in Greco's system since Albrecht's loader was used as an example of a loader in Greco' tape drive emulator and Albrecht's data cartridge was used as an embodiment of Greco's data cartridge, and since such incorporation would allow Greco's tape drive emulator to provide power to operate the disk drive of the data cartridge.

- 12. Claims 11, 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Greco**.
- 13. As per claim 11, Greco further discloses the data cartridge [40, FIG. 2] including a self-contained disk drive [12, FIG. 1 and FIG. 2] housing the disk-shaped storage medium [11, FIG. 1], therefore discloses the claimed invention except for the disk drive housing a disk drive controller.

Since it was well known in the art at the time the invention was made for a disk drive to comprise a disk drive controller to control access to the disk, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a disk controller in Greco's data cartridge to allow Greco's data cartridge to control access to the non-tape storage medium.

14. <u>As per claims 32-33</u>, Greco further discloses the non-tape storage medium comprising a disk-shaped storage medium [11, FIG. 1], therefore discloses the claimed invention except for the tape drive emulator comprising a disk drive controller.

Since it was well known in the art at the time the invention was made for a disk drive to comprise a disk drive controller to control access to the disk, and since it has

been held that rearranging parts of an invention involves only routine skill in the art (*In re Japikse*, 86 USPQ 70), it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a disk controller in Greco's tape drive emulator to allow Greco's tape drive emulator to control access to the non-tape storage medium.

15. Claims 16 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Greco** in view of **Goodman et al. (US 2002/0169521 A1)**.

Greco discloses the claimed invention except for the tape drive emulator having a form factor of an industry standard tape drive.

Goodman discloses a data storage library featuring multipurpose slots, each configured to receive a media drive (e.g. IBM 3570 tape drive: [0031], [0040]) or other various modules (Abstract, lines 1-6) to allow the data storage library to be easily updated with new equipment ([0004]), the other various modules including storage emulators ([0009]), hence teaches the storage emulators having a form factor conforming to the industry standard tape drive.

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the dimensions of Greco's tape drive emulator to conform to the industry standard tape drive because such dimensions would allow for easy replacement of existing tape drives with tape drive emulators and therefore updating the data storage library with new equipment without wasting the slots in a data storage library such as Goodman's data storage library.

Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the dimensions of Greco's tape drive emulator to conform to the industry standard tape drive, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Response to Arguments

- 16. The declaration filed on May 18, 2005 under 37 CFR 1.131 has been considered but is still ineffective to overcome the Greco reference (US2003/0070056 A1).
- 17. The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the Greco reference. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897). Per MPEP 715,

The essential thing to be shown under 37 CFR 1.131 is priority of invention and this may be done by any satisfactory evidence of the fact. FACTS, not conclusions, must be alleged. Evidence in the form of exhibits may accompany the affidavit or declaration. Each exhibit relied upon should be specifically referred to in the affidavit or declaration, in terms of what it is relied upon to show.

A general allegation that the invention was completed prior to the date of the reference is not sufficient. Ex parte Saunders, 1883 C.D. 23, 23 O.G. 1224 (Comm'r Pat. 1883). Similarly, a declaration by the inventor to the effect that his or her invention was conceived or reduced to practice prior to the reference date, without a statement of facts demonstrating the correctness of this conclusion, is insufficient to satisfy 37 CFR 1.131.

When reviewing a 37 CFR 1.131 affidavit or declaration, the examiner must consider all of the evidence presented in its entirety, including the affidavits or declarations and all accompanying exhibits, records and "notes." An accompanying exhibit need not support all claimed limitations, provided that any missing limitation is supported by the declaration itself. Ex parte Ovshinsky, 10 USPQ2d 1075 (Bd. Pat. App. & Inter. 1989).

The affidavit or declaration and exhibits must clearly explain which facts or data applicant is relying on to show completion of his or her invention prior to the particular date. Vague and general statements in broad terms about what the exhibits describe along with a general assertion that the exhibits describe a reduction to practice "amounts essentially to mere pleading, unsupported by proof or a showing of facts" and, thus, does not satisfy the requirements of 37 CFR 1.131(b). In re Borkowski, 505 F.2d 713, 184 USPQ 29 (CCPA 1974). Applicant must give a clear explanation of the exhibits pointing out **exactly** what facts are established and relied on by applicant. 505 F.2d at 718-19, 184 USPQ at 33. See also In re Harry, 333 F.2d 920, 142 USPQ 164 (CCPA 1964) (Affidavit "asserts that facts exist but does not tell what they are or when they occurred.").

In general, proof of actual reduction to practice requires a showing that the apparatus actually existed and worked for its intended purpose.

The declaration and the accompanying exhibit do not provide enough evidence to support all the claimed limitations prior to the reference date, therefore does not support conception of the claimed inventions.

Claim 13 requires that the socket of the tape drive emulator provides power to the controller of the data cartridge via the electrical connector of the data cartridge. The evidence submitted merely supports the tape drive emulator providing power to the data cartridge (instead of the controller of the data cartridge) via the electrical connector of the data cartridge.

Claim 32 requires that the tape drive emulator comprises a controller to control access to the non-tape storage medium of the data cartridge. The evidences submitted with respect to claims 1, 2, 4-8, 10-16 do not support such limitation.

Claim 33 requires that the controller within the tape drive emulator comprises a disk drive controller. The evidences submitted with respect to claims 1, 2, 4-8, 10-16 do

not support such limitation.

The examiner further noted that in sections 3, 5 respectively, applicant made references to claims 1, 2, 4-8, 10-16, 19, 26, 27, 30-34, which are not in accord with the pending claims - as claim 19 was cancelled.

18. Per MPEP 2138.06,

THE ENTIRE PERIOD DURING WHICH DILIGENCE IS REQUIRED MUST BE ACCOUNTED FOR BY EITHER AFFIRMATIVE ACTS OR ACCEPTABLE EXCUSES

An applicant must account for the entire period during which diligence is required. Gould v. Schawlow, 363 F.2d 908, 919, 150 USPQ 634, 643 (CCPA 1966) (Merely stating that there were no weeks or months that the invention was not worked on is not enough.); In re Harry, 333 F.2d 920, 923, 142 USPQ 164, 166 (CCPA 1964) (statement that the subject matter "was diligently reduced to practice" is not a showing but a mere pleading). A 2-day period lacking activity has been held to be fatal. In re Mulder, 716 F.2d 1542, 1545, 219 USPQ 189, 193 (Fed. Cir. 1983) (37 CFR 1.131 issue); Fitzgerald v. Arbib, 268 F.2d 763, 766, 122 USPQ 530, 532 (CCPA 1959) (Less than 1 month of inactivity during critical period. Efforts to exploit an invention commercially do not constitute diligence in reducing it to practice. An actual reduction to practice in the case of a design for a three-dimensional article requires that it should be embodied in some structure other than a mere drawing.); Kendall v. Searles, 173 F.2d 986, 993, 81 USPQ 363, 369 (CCPA 1949) (Diligence requires that applicants must be specific as to dates and facts.).

The period during which diligence is required must be accounted for by either affirmative acts or acceptable excuses. Rebstock v. Flouret, 191 USPQ 342, 345 (Bd. Pat. Inter. 1975); Rieser v. Williams, 225 F.2d 419, 423, 118 USPQ 96, 100 (CCPA 1958) (Being last to reduce to practice, party cannot prevail unless he has shown that he was first to conceive and that he exercised reasonable diligence during the critical period from just prior to opponent's entry into the field); Griffith v. Kanamaru, 816 F.2d 624, 2 USPQ2d 1361 (Fed. Cir. 1987) (Court generally reviewed cases on excuses for inactivity including vacation extended by ill health and daily job demands, and held lack of university funding and personnel are not acceptable excuses.); Litchfield v. Eigen, 535 F.2d 72, 190 USPQ 113 (CCPA 1976) (budgetary limits and availability of animals for testing not sufficiently described); Morway v. Bondi, 203 F.2d 741, 749, 97 USPQ 318, 323 (CCPA 1953) (voluntarily laying aside inventive concept in pursuit of other projects is generally not an acceptable excuse although there may be circumstances creating exceptions); Anderson v. Crowther, 152 USPQ 504, 512 (Bd. Pat. Inter. 1965) (preparation of routine periodic reports covering all accomplishments of the laboratory insufficient to show diligence); Wu v. Jucker, 167 USPQ 467, 472-73 (Bd. Pat. Inter. 1968) (applicant improperly allowed test data sheets to accumulate to a sufficient amount to justify interfering with equipment then in use on another project); Tucker v. Natta, 171 USPQ 494,498 (Bd. Pat. Inter. 1971) ("[a]ctivity directed toward the reduction to practice of a genus does not establish, prima facie, diligence toward the reduction to practice of a species embraced by said genus"); Justus v. Appenzeller, 177 USPQ

332, 340-1 (Bd. Pat. Inter. 1971) (Although it is possible that patentee could have reduced the invention to practice in a shorter time by relying on stock items rather than by designing a particular piece of hardware, patentee exercised reasonable diligence to secure the required hardware to actually reduce the invention to practice. "[I]n deciding the question of diligence it is immaterial that the inventor may not have taken the expeditious course....").

The diligence of attorney in preparing and filing patent application inures to the benefit of the inventor. Conception was established at least as early as the date a draft of a patent application was finished by a patent attorney on behalf of the inventor. Conception is less a matter of signature than it is one of disclosure. Attorney does not prepare a patent application on behalf of particular named persons, but on behalf of the true inventive entity. Six days to execute and file application is acceptable. Haskell v. Coleburne, 671 F.2d 1362, 213 USPQ 192, 195 (CCPA 1982). See also Bey v. Kollonitsch, 866 F.2d 1024, 231 USPQ 967 (Fed. Cir. 1986) (Reasonable diligence is all that is required of the attorney. Reasonable diligence is established if attorney worked reasonably hard on the application during the continuous critical period. If the attorney has a reasonable backlog of unrelated cases which he takes up in chronological order and carries out expeditiously, that is sufficient. Work on a related case(s) that contributed substantially to the ultimate preparation of an application can be credited as diligence.).

The evidence submitted is insufficient to establish diligence from a date prior to the effective date of the Greco reference (October 5, 2001) to the US filing date of this application (January 14, 2002) because there are several periods lacking activity (<u>a 2-day period lacking activity has been held to be fatal</u>).

In sections 21-22, applicant merely provided blanket statements to support diligence between October 5, 2001 to January 14, 2002, without being specific as to dates and facts. Furthermore, it is noted that applicant's daily job demands (applicant's normal workload) are not acceptable excuses for inactivity. Since sections 23-29 did not cover all the specifics as to dates and facts, sections 21-29 are insufficient to establish diligence between October 5, 2001 and January 14, 2002. Applicant appears to rely on the attorney to indicate that the periods of inactivity was due to normal workload associated with the attorney's practice. However, no statement by the attorney is included.

Art Unit: 2182

There is no activity between 10/05/2001 and 10/08/2001 (section 23 is only specific as to October 9, 2001; Exhibit B shows activities only for 9/26/01, 10/01/01 and 10/09/01), and there is no statement by the attorney declaring "any period between October 5, 2001 and October 9, 2001 during which the invention was not worked on was due to normal attorney workload associated with the attorney's practice";

there is no statement by the attorney declaring "any period between October 9, 2001 and December 10, 2001 during which the invention was not worked on was due to normal attorney workload associated with the attorney's practice" (section 23 is only specific as to October 9, 2001 and section 24 is only specific as to December 10, 2001 - as it is not clear what "during this period" means; Exhibit B does not show any activity after October 9, 2001; Exhibit C shows activity only for December 10, 2001 and Exhibit D shows activities only for 12/05/01-12/07/01, 12/10/01);

there is no statement by the attorney declaring "any period between December 10, 2001 and December 14, 2001 during which the invention was not worked on was due to normal attorney workload associated with the attorney's practice" (section 24 is only specific as to December 10, 2001 and sections 25-26 are only specific as to December 14, 2001; Exhibit C shows activity only for December 10, 2001 and Exhibit D shows activities only for 12/10/01, 12/14/01);

a statement by the attorney declaring "any period between December 14, 2001 and December 21, 2001 during which the invention was not worked on was due to normal attorney workload associated with the attorney's practice" is not required, but is recommended (sections 25-28 are specific as to December 14, 2001 and December 21,

2001; Exhibit D shows activities for 12/18/01 and 12/19/01 and Exhibit E shows activity only for December 21, 2001);

there is no statement by the attorney declaring "any period between December 21, 2001 and January 14, 2002 during which the invention was not worked on was due to normal attorney workload associated with the attorney's practice" (sections 27-29 are specific as to December 21, 2001 and January 14, 2002; Exhibit D does not show any activity after 12/19/01 and Exhibit E shows activity only for December 21, 2001).

The examiner further notes that applicant made reference to claims 1-19 and 26-37 in section 20, which is not in accord with the pending claims - as several claims were canceled in the response; and in section 21, applicant made reference to January 14, 2001 instead of January 14, 2002.

Conclusion

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanh Quang Nguyen whose telephone number is (571) 272-4154 and whose e-mail address is tanh.nguyen36@uspto.gov. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached on (571) 272-4083. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 for After Final, Official, and Customer Services, or (571) 273-4154 for Draft to the Examiner (please label "PROPOSED" or "DRAFT").

Effective May 1, 2003 are new mailing address is:

Mail Stop

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Effective December 1, 2003, hand-carried patent application related incoming correspondences will be to a centralized location.

U.S. Patent and Trademark Office

2011 South Clark Place

Customer Window

Crystal Plaza Two, Lobby, Room 1B03

Arlington, VA 22202

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Application/Control Number: 10/047,280 Page 16

Art Unit: 2182

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

KIM HUYNH
PRIMARY EXAMINER

TQN July 27, 2005